



Air Quality Permitting Analysis

July 29, 2003

Tier I Operating Permit No. TI-020526

INEEL – IRC, Idaho Falls

AIRS Facility No. 019-00048

Prepared by:

*Carole Zundel, Permit Writer
Program Office*

AMENDED FINAL PERMIT

1. PURPOSE

The purpose of this memorandum is to explain the legal and factual basis for this administrative amendment to the Tier I operating permit in accordance with IDAPA 58.01.01.381.

The DEQ has reviewed the information provided by the INEEL regarding the proposed modifications to the 10/29/2002 Tier I operating permit No. 019-00048 for the IRC facility located in Idaho Falls. This information was submitted based on the requirements to submit an administrative amendment to a Tier I operating permit application in accordance with IDAPA 58.01.01.381.

2. SUMMARY OF EVENTS

On December 6, 2002, DEQ received the request for an administrative amendment to the Tier I operating permit No. 019-00048 from INEEL – IRC for the INEEL Research Center (IRC) Idaho Falls facility.

No public comment period is required for an administrative amendment per IDAPA 58.01.01.381.

3. BASIS OF THE ANALYSIS

The following documents were relied upon in preparing this memorandum and the Tier I operating permit:

- Tier I operating permit No. 019-00048 dated October 29, 2002.
- Request for administrative amendment dated December 6, 2002.
- Attachment to March 26, 2003 e-mail from John Gill, INEEL, to Carole Zundel, DEQ, titled "Modified Method 22 - Determination of Visible/Fugitive Dust Emissions, Methodology For INEEL Quarterly Visible Inspections.

Permitting History

10/29/2002 Tier I operating permit issued.

4. REGULATORY ANALYSIS

Facility-Wide Applicable Requirements

4.1 Fugitive PM - IDAPA 58.01.01.650-651

As requested by the facility, all references to "fugitive emissions" were changed to "fugitive dust" to accurately reflect the wording in IDAPA 58.01.01.650-651.

4.2 Visible Emissions - IDAPA 58.01.01.625

Requirement

IDAPA 58.01.01.625 and Permit Condition 2.7 state that "(No) person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined . . ." by IDAPA 58.01.01.625. This provision does not apply when the presence of uncombined water, NO_x, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this rule.

Compliance Demonstration

Permit Condition 2.8 requires the permittee to conduct routine visible emissions inspections of the facility to ensure reasonable compliance with the visible emissions rule. The permittee is required to inspect potential sources during daylight hours and under normal operating conditions. The inspection consists of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission covered by this condition, the permittee must either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is determined to be greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee must take corrective action and report the exceedance in its semi-annual monitoring/deviation report, the annual compliance certification, in accordance with the excess emissions rules in IDAPA 58.01.01.130-136. The permittee is also required to maintain records of the results of each visible emissions inspection and each opacity test when conducted. These records must include the date of each inspection, a description of the permittee's assessment of the conditions existing at the time visible emissions are present, any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Should an emission unit have a specific compliance demonstration method for visible emissions that differs from Facility-Wide Condition 2.8, then the specific compliance demonstration method overrides the requirement of this condition. Facility-Wide Condition 2.8 is intended for small sources that would generally not have any visible emissions.

Permit Condition 2.8 requires the permittee to take corrective action as expeditiously as practicable. In general, DEQ believes that taking corrective action within 24 hours of discovering visible emissions meets the intent of this requirement. However, it is understood that, depending on the circumstances, immediate action or a longer time period may be necessary.

4.3 NSPS – 40 CFR 60

The facility has a 15,000 gallon gasoline underground storage tank which was installed after July 23, 1984. The tank is exempt from 40 CFR 60 Subpart Kb per 40 CFR 60.110b (d) (6) because it is a storage vessel located at a gasoline service station. The definition of "gasoline service stations" in 40 CFR 60.111b (e) is "any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks." Therefore, the 40 CFR 60 Subpart Kb does not apply and the corresponding requirements in the Tier I operating permit were removed.

4.4 General Provision 21

The periodic compliance certification due date was changed from "permit issuance date" to "initial permit issuance date (October 29, 2002)."

4.5 General Provision 24

The semiannual monitoring reporting due date was changed from "date of permit issuance" to "initial permit issuance date (October 29, 2002)."

5. INSIGNIFICANT ACTIVITIES

The insignificant activities section will be removed from the operating permit as requested. This section is required to be in the permit application for the permit shield, but is not required to be in the permit.

6. COMPLIANCE SCHEDULE

Compliance Certification

This technical memorandum changes the wording of the Compliance Certification from the previous technical memorandum from:

"The permittee is required to submit a periodic compliance certification for each emissions unit in the form of an annual report to DEQ and the EPA annually beginning 12 months from the permit issuance date. The permittee must certify compliance with all terms and conditions of the permit including, but not limited to, fugitive emissions standards, visible emissions standards, steam production, compliance testing, and radionuclides possession quantities and/or dose equivalents in accordance with IDAPA 58.01.01.322.11. Refer to General Provision 21."

to:

"The permittee is required to submit a periodic compliance certification for each emissions unit in the form of an annual report to DEQ and the EPA annually beginning 12 months from October 29, 2002. The permittee must certify compliance with all terms and conditions of the permit including, but not limited to, fugitive emissions standards, visible emissions standards, compliance testing, and radionuclides possession quantities and/or dose equivalents in accordance with IDAPA 58.01.01.322.11. Refer to General Provision 21."

This was done in order to eliminate the reference to steam production, as none of the permit terms or conditions limit or require tracking of steam production. Also, the periodic compliance certification date specifies the actual issuance date of the original permit.

7. OTHER MODIFICATIONS REQUESTED

The December 6, 2002 administrative amendment request from INEEL included two items that were not incorporated into the amended permit.

Request: In Section 2.7 DEQ agreed to add "and Section 2.8" to the end of the final sentence. This addition will clarify the visible emissions inspection requirements in Section 2.8. For the same reason, Section 9.2 of the technical memorandum will be modified by removing the term "steam production."

Response: The first sentence of the request was not incorporated because it is not necessary and may cause confusion of the intent of the permit condition. In a phone conversation between Carole Zundel of DEQ and John Gill of INEEL on March 25, 2003, it was discussed that the reason to add the words "and Section 2.8" was to clarify that the exclusion of uncombined water, nitrogen oxides, and/or chlorine gas in the visible emissions rule applies to the see/no see definition of visible emissions, also. Otherwise, for sources that have visible uncombined water, nitrogen oxides, and/or chlorine gas emissions, a Method 9 visible emission evaluation would be required every time a see/no see evaluation was done. Because Dan Salgado, permit program coordinator, DEQ, was present in some of the previous meetings on this topic with INEEL, he was consulted regarding this subject, and he said that the uncombined water, nitrogen oxides, and/or chlorine gas exclusion in the method 9 visible emissions applies also to the definition of visible emissions for the see/no see evaluation. Therefore, adding "and Section 2.8" to the end of Permit Condition 2.7 is unnecessary.

It could not be determined who at DEQ agreed to add the words "and Section 2.8" to the end of the final sentence.

The second sentence in the above-referenced request has been addressed in Section 4.3 of this technical memorandum.